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VA720

LCD Display

User Guide

Guide de l'utilisateur

Bedienungsanleitung

Guía del usuario

Guida dell'utente

Guia do usuário

Användarhandbok

Käyttöopas

Руководство пользователя

Instrukcja obsługi

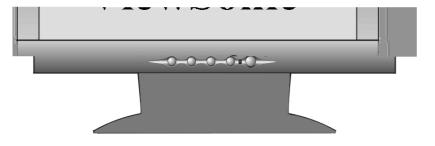
ユーザーズ ガイド

使用手冊

使用手册

사용자 안내서

دليل المستخدم



Full 17'' Diagonal Viewable Screen

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Product Registration

To meet your future needs, and to receive any additional product information as it becomes available, please register your product on the Internet at: **www.viewsonic.com**. The ViewSonic[®] Wizard CD-ROM also provides an opportunity for you to print the registration form, which you may mail or fax to ViewSonic.

For Your Records

Product Name: Model Number: Document Number: Serial Number: Purchase Date:

ViewSonic VA720 VLCDS23895-3W A-CD-VA720-1

Product disposal at end of product life

ViewSonic is concerned about the preservation of our environment. Please dispose of this product properly at the end of its useful life. Your local waste disposal company may provide information about proper disposal.

Getting Started

Congratulations on your purchase of a ViewSonic[®]LCD display. *Important!* Save the original box and all packing material for future shipping needs.

NOTE: The word "Windows" in this user guide refers to the following Microsoft operating systems: Windows 95, Windows NT, Windows 98, Windows 2000, Windows Me (Millennium), and Windows XP.

Package Contents

Your LCD display package includes:

- LCD display
- Power cords
- ViewSonic Wizard CD-ROM

NOTE: The CD jacket contains the Quick Start Guide, and the CD includes the User Guide PDF files and INF/ICM display optimization files. The INF file ensures compatibility with Windows operating systems, and the ICM file (Image Color Matching) ensures accurate on-screen colors. ViewSonic recommends that you install both files.

Precautions

- Sit at least 18" from your LCD display.
- Avoid touching the screen. Skin oils are difficult to remove.
- Never remove the rear cover. Your LCD display contains high-voltage parts. You may be seriously injured if you touch them.
- Avoid exposing your LCD display to direct sunlight or another heat source. Orient your LCD display away from direct sunlight to reduce glare.
- Always handle your LCD display with care when moving it.

- Place your LCD display in a well-ventilated area. Do not place anything on your LCD display that prevents heat dissipation.
- Ensure the area around the LCD display is clean and free of moisture.
- Do not place heavy objects on the LCD display, video cable, or power cord.
- If smoke, abnormal noise, or strange odor is present, immediately switch the LCD display off and call your dealer or ViewSonic. It is dangerous to continue using the LCD display.

Quick Installation

Optional: For instructions on wall mounting, see page 5 of this user guide.

1 Connect power cord

2 Connect video cable

- Make sure both the LCD display and computer are turned OFF
- Remove rear panel covers if necessary
- Connect the video cable from the LCD display to the computer

Macintosh users: Models older than G3 require a Macintosh adapter. Attach the adapter to the computer and plug the video cable into the adapter.

To order a ViewSonic[®] Macintosh adapter, contact ViewSonic *Customer Support*.

3 Turn ON LCD display and computer

• Turn ON the LCD display, then turn ON the computer. This sequence (LCD display before computer) is important

NOTE: Windows users may receive a message asking them to install the INF file. This is on the CD.

4 Insert the ViewSonic Wizard CD into the computer's CD drive

• Follow the on-screen instructions

If your computer does not have a CD-ROM drive, see "Customer Support."

(1) Wait for the CD-ROM to auto-start.

NOTE: If the CD-ROM does not auto-start: double-click on the CD-ROM icon in the Windows Explorer, then double-click on **viewsonic.exe**.

(2) Follow the on-screen instructions.

5 <u>Windows users</u>: Set the timing mode (resolution and refresh rate)

Example: 1280 x 1024 @ 60 Hz.

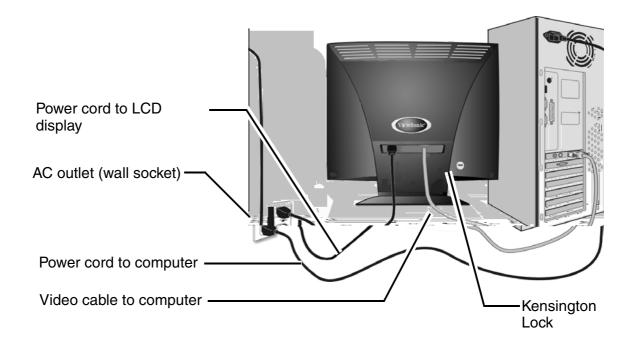
For instructions on changing the resolution and refresh rate, see the graphic card's user guide.

Installation is complete. Enjoy your new ViewSonic, LCD display.

To be best prepared for any future customer service needs: print this user guide and write the serial number in *"For Your Records"* on page 2. (See back of LCD display.)

You can register your product online at the website for your region. See the Customer Support table in this guide.

The ViewSonic Wizard CD-ROM also provides an opportunity for you to print the registration form which you may mail or fax to ViewSonic.

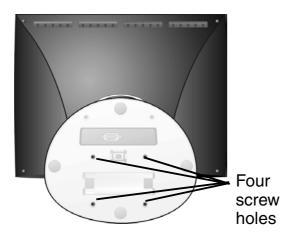


Installation of Wall Mount (Optional)

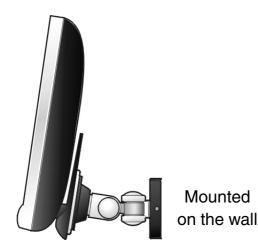
To obtain a wall-mounting kit, contact ViewSonic or your local dealer. Refer to the instructions that come with the base mounting kit. To convert your LCD displayfrom a desk-mounted to a wall-mounted display, do the following:



- 1 Disconnect Power.
- 2 Push the LCD display back and down flat against the base as shown.



- **3** Lay the LCD displayface down on a towel or blanket. Notice the four screw holes on the bottom of the base.
- 4 Attach the mounting bracket from the VESA compatible wallmounting kit (100 mm x 100 mm distance).



5 Attach the LCD displayto the wall, following the instructions in the wall-mounting kit.

Using the LCD Display

Setting the Timing Mode

Setting the timing mode is important for maximizing the quality of the screen image and minimizing eye strain. The **timing mode** consists of the **resolution** (example 1280 x 1024) and **refresh rate** (or vertical frequency; example 60 Hz). After setting the timing mode, use the OnView[®] controls to adjust the screen image.

For the best picture quality set your LCD display timing mode to: **VESA 1280 x 1024 @ 60 Hz.**

To set the Timing Mode:

- 1 <u>Set the resolution</u>: Right-click on the Windows desktop > **Properties** > **Settings** > set the resolution.
- 2 <u>Set the refresh rate</u>: See your graphic card's user guide for instructions.

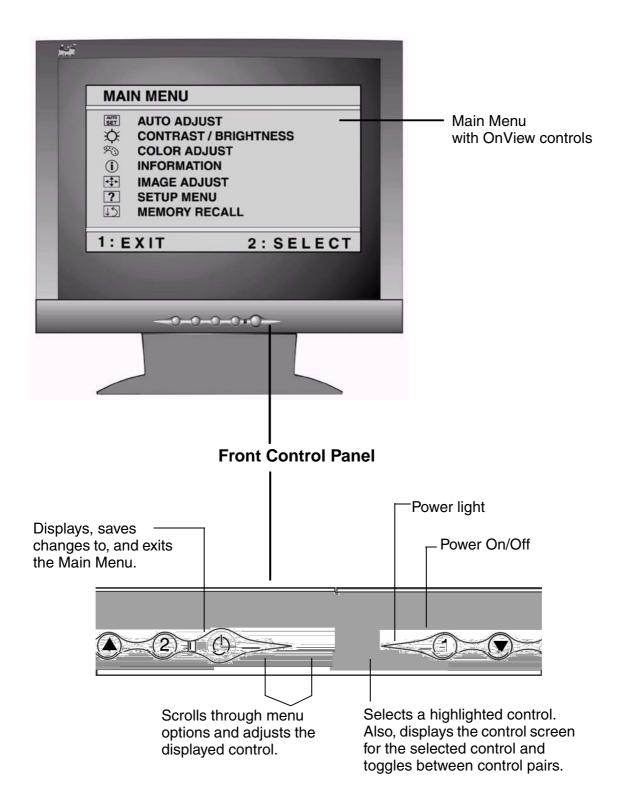
WARNING: Do not set the graphics card in your computer to exceed the maximum refresh rate of 75Hz; <u>doing so may result in permanent damage to your LCD display</u>.

OSD and Power Lock Settings

- **OSD Lock:** Press and hold [1] and the up arrow ▲ for 10 seconds. If any buttons are pressed the message *OSD Locked* will display for a few seconds.
- **OSD Unlock:** Press and hold [1] and the up arrow \blacktriangle again for 10 seconds.
- **Power Button Lock:** Press and hold [1] and the down arrow ▼ for 10 seconds. If the power button is pressed the message *Power Button Locked* will display for a few seconds. With or without this setting, after a power failure, your LCD display's power will automatically turn ON when power is restored.
- **Power Button Unlock:** Press and hold [1] and the down arrow ▼ again for 10 seconds.

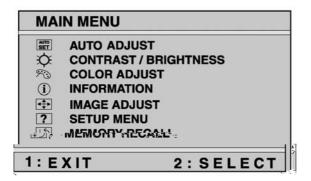
Adjusting the Screen Image

Use the buttons on the front control panel to display and adjust the OnView[®] controls. The OnView controls are explained at the top of the next page and are defined in "Main Menu Controls" on page 9.



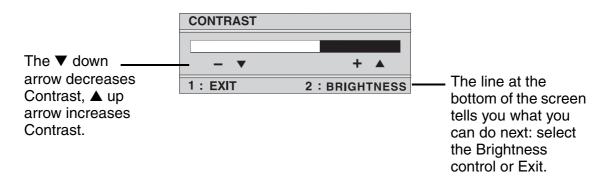
Do the following to adjust the screen image:

1 To display the Main Menu, press button [1].



NOTE: All OnView menus and adjustment screens disappear automatically after about 30 seconds. This time period is adjustable through the Setup menu and the OSD timeout control described on page 11.

- 2 To highlight a control you want to adjust, press ▲ or ▼ to scroll up or down the Main Menu.
- **3** To select the highlighted control, press button [2]. A control screen appears like the example shown below.



- 4 To adjust the control, press the up \blacktriangle or down \checkmark buttons.
- **5** To save the adjustments and exit the menu, press button [1] *twice*.

The following tips may help you optimize your display:

- Adjust your computer's graphic card so that it outputs a video signal 1280 x 1024 @ 60 Hz to the LCD display. (Look for instructions on "changing the refresh rate" in your graphic card's user guide.)
- If necessary, make small adjustments using H POSITION and V POSITION until the screen image is <u>completely visible</u>. (The black border around the edge of the screen should barely touch the illuminated "active area" of the LCD display.)

Main Menu Controls

Adjust the menu items shown below by using the up \blacktriangle and down \checkmark buttons.

Control Explanation

Auto Adjust automatically sizes, centers, and fine tunes the video signal to eliminate waviness and distortion. Press the [2] button to obtain a sharper image.

NOTE: Auto Adjust works with most common video cards. If this function does not work on your LCD display, then lower the video refresh rate to 60 Hz and set the resolution to its pre-set value.

Contrast adjusts the difference between the image background (black level) and the foreground (white level).

Brightness adjusts background black level of the screen image.

Color Adjust provides several color options: preset color temperatures and User which allows you to adjust red (R), green (G), and blue (B). The factory setting for this product is 6500K (6500 Kelvin).

User — Individual adjustments for red, green, and blue.

5400K — Adds blue and green to the screen image for a darker color.

6500K — Adds red to the screen image for warmer white and richer red. Default setting.

9300K — Adds blue to the screen image for cooler white (used in most office settings with fluorescent lighting).

- **1** To select color (R, G or B) press button [2].
- **2** To adjust selected color, press \blacktriangle or \blacktriangledown .
- **3** When you are finished making all color adjustments, press button [1] *twice*.

Information

| Control | Explanation |
|---------|--|
| | Image Adjust |
| | IMAGE ADJUST |
| | □ H/V POSITION □ H SIZE □ FINETUNE □ SHARPNESS |
| | 1: EXIT |
| | The Image Adjust controls are explained below: |
| | H./V. Position adjusts horizontal and vertical position of the screen image. You can toggle between Horizontal and Vertical by pressing button [2] Horizontal moves the screen image to |

by pressing button [2]. Horizontal moves the screen image to the left or to the right. Vertical moves the screen image up and down.

H. Size (Horizontal Size) adjusts the width of the screen image. Vertical size is automatic with your LCD display.

Fine Tune sharpens focus by aligning the illuminated text and/ or graphic characters.

Try the **Auto Adjust** (see page 9) before using the **Fine Tune** control.



 \leftrightarrow

Sharpness adjusts the clarity and focus of the screen image.



Setup Menu displays the menu shown below:

| SET | UP MENU | |
|------------|---------------------|--|
| ۲ | LANGUAGE SELECT | |
| | RESOLUTION NOTIFIER | |
| OSD | OSD POSITION | |
| \bigcirc | OSD TIMEOUT | |
| | | |
| 1:E | ХІТ | |

The Setup Menu controls are explained below:



Language Select allows you to choose the language used in the menus and control screens.

Control Explanation Image: Provide the optimal resolution to use. Resolution Notifier advises the optimal resolution to use.



ws you to move the on-screen display menus is.

ets the length of time an on-screen display ayed. For example, with a "15 second" setting, if ot pushed within 15 seconds, the display screen

.ecall returns adjustments to the original factory *i* the display is operating in a factory Preset Timing sted in this user guide.

Other Information

Specifications

| LCD | Type Color Filter Glass surface | 17" (full 17" viewable diagonal area), TFT (Thin Film Transistor), Active Matrix SXGA LCD, 0.264 mm pixel pitch RGB vertical stripe Anti-Glare | |
|----------------------|---------------------------------------|---|--|
| Panel tilt | | -3 ~ 20° | |
| Input signal | Video Sync | RGB analog (0.7/1.0 Vp-p, 75 ohms) Separate Sync f _h :30-82 kHz, f _v :50-75 Hz | |
| Compatibility | PC Macintosh ¹ | Up to 1280 x 1024 Non-interlaced Power Macintosh up to 1280 x 1024 | |
| Resolution | Recommended and supported | 1280 x 1024 @ 60, 75 Hz 1024 x 768 @ 60, 70, 72, 75 Hz 800 x 600 @ 56, 60, 72, 75 Hz 640 x 480 @ 60, 75 Hz 640 x 350 @ 70 Hz 720 x 400 @ 70 Hz | |
| Power | Voltage | 100-240 VAC, 50/60 Hz (auto switch) | |
| Display area | Full Scan | 337.92 mm (H) x 270.34 mm (V) 13.30" (H) x 10.64" (V) | |
| Operating conditions | Temperature Humidity Altitude | +32° F to +104° F (0° C to +40° C) 10% to 90% (no condensation) To 10,000 feet | |
| Storage conditions | Temperature Humidity Altitude | -4° F to +140° F (-20° C to +60° C) 10% to 90% (no condensation) To 40,000 feet | |
| Dimensions | Physical (LCD display only) | 415 mm (W) x 419 mm (H) x 230 mm (D) 16.34" (W) x 16.5" (H) x 9.1" (D) | |
| Weight | Net | 6.2 kg (13.61 lbs) LCD display only | |
| Regulations | | UL, FCC-B, ENERGY STAR [®] , FCC-B (Doc-B), CE, MPRII, NEMKO, SEMKO, DEMKO, FIMKO, C-UL, TCO99, TUV/GS, E2002, EPA, VCCI, BSMI, CB, ISO13406-2, PCT (BZ02), PSB, PCBC | |
| Power saving modes | On Active Off | Normal (green LED) < 2W (orange LED) | |

Preset Timing Mode (pre-adjusted to VESA[®] 1280 x 1024@ 60 Hz)

Warning: Do not set the graphics card in your computer to exceed these refresh rates; doing so may result in permanent damage to the LCD display.

¹ Macintosh computers older than G3 require a ViewSonic[®], Macintosh adapter. To order an adapter, contact ViewSonic.

Troubleshooting

No power

- Make sure power button (or switch) is ON.
- Make sure A/C power cord is securely connected to the DC power supply and the power supply is firmly connected to the LCD display.
- Plug another electrical device (like a radio) into the power outlet to verify that the outlet is supplying proper voltage.

Power is ON but no screen image

- Make sure the video cable supplied with the LCD display is tightly secured to the video output port on the back of the computer. If the other end of the video cable is not attached permanently to the LCD display, tightly secure it to the LCD display.
- Adjust brightness and contrast.
- If you are using an Macintosh older than G3, you need a Macintosh adapter.

Wrong or abnormal colors

- If any colors (red, green, or blue) are missing, check the video cable to make sure it is securely connected. Loose or broken pins in the cable connector could cause an improper connection.
- Connect the LCD display to another computer.
- If you have an older graphics card, contact ViewSonic for a non-DDC adapter.

Control buttons do not work

• Press only one button at a time.

Customer Support

For technical support or product service, see the table below or contact your reseller.

NOTE: You will need the product serial number.

| Country/ Region | Web site | T = Telephone F = FAX | Email |
|--|---------------------------|--|------------------------------------|
| United States | viewsonic.com/ support | T: (800) 688-6688 F: (909) 468-1202 | service.us@ viewsonic.com |
| Canada | viewsonic.com/ support | T: (800) 688-6688 F: (909) 468-1202 | service.ca@ viewsonic.com |
| United Kingdom | viewsoniceurope.com | T : 0800 833 648 F : (01293) 643910 | service.eu@ viewsoniceurope.com |
| Europe, Middle East, Baltic countries, and North Africa | viewsoniceurope.com | Contact your reseller | service.eu@ viewsoniceurope.com |
| Australia and New Zealand | viewsonic.com.au | T : +61 2 9929 3955 F : +61 2 9929 8393 | service.au@ viewsonic.com |
| Singapore/India and Southeast Asia | viewsonic.com.sg | T: 65 273 4018 F: 65 273 1566 | service.sg@ viewsonic.com |
| Other Asia/Pacific countries | viewsonic.com.tw | T: 886 2 2246 3456 F: 886 2 8242 3668 | service.ap@ viewsonic.com |
| South Africa | viewsonic.com/asia | T: 886 2 2246 3456 F: 886 2 8242 3668 | service.ap@ viewsonic.com |

Cleaning the LCD Display

- MAKE SURE THE LCD DISPLAY IS TURNED OFF.
- NEVER SPRAY OR POUR ANY LIQUID DIRECTLY ONTO THE SCREEN OR CASE.

To clean the screen:

- 1 Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- 2 If still not clean, apply a small amount of <u>non-ammonia</u>, <u>non-alcohol</u> based glass cleaner onto a clean, soft, lint-free cloth, and wipe the screen.

To clean the case:

- 1 Use a soft, dry cloth.
- **2** If still not clean, apply a small amount of a non-ammonia, non-alcohol based, mild non-abrasive detergent onto a clean, soft, lint-free cloth, then wipe the surface.

Disclaimer

ViewSonic does not recommend the use of any ammonia or alcohol-based cleaners on the LCD display screen or case. Some chemical cleaners have been reported to damage the screen and/or case of the LCD display. ViewSonic will not be liable for damage resulting from use of any ammonia or alcohol-based cleaners.

Limited Warranty VIEWSONIC LCD DISPLAY

What the warranty covers:

ViewSonic warrants its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, **ViewSonic** will, at its sole option, repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

How long the warranty is effective:

ViewSonic[®] LCD displays are warranted for 1 years for all parts including the light source and 1 years for all labor from the date of the first consumer purchase.

Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

What the warranty does not cover:

- 1. Any product on which the serial number has been defaced, modified or removed.
- 2. Damage, deterioration or malfunction resulting from:
 - a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - b. Repair or attempted repair by anyone not authorized by ViewSonic.
 - c. Any damage of the product due to shipment.
 - d. Removal or installation of the product.
 - e. Causes external to the product, such as electrical power fluctuations or failure.
 - f. Use of supplies or parts not meeting ViewSonic's specifications.
 - g. Normal wear and tear.
 - h. Any other cause which does not relate to a product defect.
- 3. Removal, installation, and set-up service charges.

How to get service:

- 1. For information about receiving service under warranty, contact **ViewSonic Customer Support**. You will need to provide your product's serial number.
- 2. To obtain service under warranty, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
- 3. Take or ship the product freight prepaid in the original container to an authorized **ViewSonic** service center or **ViewSonic**.
- 4. For additional information or the name of the nearest **ViewSonic** service center, contact **ViewSonic**.

Limitation of implied warranties:

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE AOND TH931 -1.5707 TTc0MERCHACRIPTIONBILIE' AND

Appendix Safety Guidelines

CAUTION: The socket-outlet should be installed near the equipment and should be easily accessible.

CAUTION: Use a power cable that is properly grounded. Always use the appropriate AC cord that is certified for the individual country. Some examples are listed below:

| USAUL | |
|-------------|--|
| CanadaCSA | |
| Germany VDE | |

Switzerland SEV Britain BASE/BS Japan Electric Appliance Control Act

IMPORTANT NOTICE CONCERNING POWER CORD SELECTION

The power cord set for this unit has been enclosed and has been selected according to the country of destination and must be used to prevent electric shock. Use the following guidelines if it is necessary to replace the original cord set, or if the cord set is not enclosed.

The female receptacle of the cord set must meet IEC-60320 requirements and may look like (Figure A1 below):



For the United States and Canada

In the United States and Canada the male plug is a NEMA5-15 style (Figure A2), UL Listed, and CSA Labeled. For units which are mounted on a desk or table, type SVT or SJT cord sets may be used. For units which sit on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for your unit. Please consult the table below for the selection criteria for power cords used in the United States and Canada.

| Cord Type | Size of Conductors in Cord | Maximum Current Rating of Unit |
|-----------|----------------------------|--------------------------------|
| SJT | 18 AWG 16 AWG 14 AWG | 10 Amps 12 Amps 12 Amps |
| SVT | 18 AWG 17 AWG | 10 Amps 12 Amps |

For European Countries

In Europe you must use a cord set which is appropriate for the receptacles in your country. The cord set is HAR-Certified, and a special mark that will appear on the outer sheath, or on the insulation of one of the inner conductors.

AC PLUG CORD PRECAUTIONS FOR THE UNITED KINGDOM

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET THEN THE PLUG SHOULD BE CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO AN APPROPRIATE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

WARNING: THIS APPLIANCE MUST BE EARTHED.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow: Earth

Blue: Neutral

Brown: Live

If the coloured wires of the mains lead of this appliance do not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the Earth symbol or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

If you have any questions concerning which proper power cord to use, please consult with the dealer from whom you have purchased the product.

Compliance Information for U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Warning

To assure continued FCC compliance, the user must use grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. If a BNC cable is going to be used, use only a shielded BNC(5) cable. Also, any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

CE Conformity for Europe



The device complies with the requirements of the EEC directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC Art.5 with regard to "Electromagnetic compatibility", and 73/23/EEC as amended by 93/68/EEC Art.13 with regard to "Safety".

ViewSonic[®] Corporation